

Reg. No .....

Name .....

22U344

**B. Sc. DEGREE END SEMESTER EXAMINATION : OCTOBER 2022**

**SEMESTER 3 : COMPLEMENTARY COURSE FOR B Sc PSYCHOLOGY**

**COURSE : 19U3CPBHS03 : NEUROPHYSIOLOGY OF BEHAVIOUR I - PAPER III**

*(For Regular - 2021 Admission and Improvement / Supplementary - 2020 Admission)*

Time : Three Hours

Max. Marks: 75

**PART A**

**Answer All (1 mark each)**

1. How many spinal nerves exist in the human Nervous System?
2. In which pathological condition associated with the meninges would one observe symptoms like fever, headache, vomiting, severe pain and stiffness of the neck?
3. A decrease in which neurotransmitter is thought to be related to Alzheimer's disease?
4. The higher mental functions, such as thinking and problem solving, are associated with which lobe?
5. Name the category of neuropeptides that were first discovered in the gut.
6. Name the small protrusions that cover each branch of the dendrites and help increase the dendrite's surface area.
7. Name the innermost layer of the neocortex that directly overlies the subcortical white matter.
8. Which are the chief category of neurons in the Hippocampus?
9. What is the name of the auditory task in which the subject is instructed to attend to two different spoken messages presented simultaneously, one to each ear?
10. How many pairs of Lumbar Nerves are there in the human Nervous System?

**(1 x 10 = 10)**

**PART B**

**Answer any 8 (2 marks each)**

11. Write a short note on any two small molecule neurotransmitters.
12. What are Mechanoreceptors? Give examples.
13. Why is Wernicke's Aphasia also called comprehension Aphasia?
14. Write a note on the Internal Pyramidal Layer of the neocortex.
15. Write a note on the Cervical nerves.
16. Differentiate between Myelencephalon and Metencephalon.
17. How is the resting membrane potential of a neuron measured?
18. What purpose does the refractory period serve with respect to neural activity?
19. Write a short note on the Vestibulocochlear Nerve.
20. How does the midbrain regulate the movement of the eye?

**(2 x 8 = 16)**

**PART C**

**Answer any 5 (5 marks each)**

21. Explain the factors that contribute to the maintenance of resting membrane potential.
22. Explain briefly the functions of the Frontal Lobe.
23. Write a short note on the spinal nerves and their functions.
24. Explain the major functions of dopamine with the help of an example.
25. Differentiate between Cerebrum and Cerebellum.
26. Write a note on the Spatial Skills of the Right Hemisphere.
27. Is there any linkage to hemispheric assymetry in certain types of stuttering? Give reasons for your answer.

**(5 x 5 = 25)**

**PART D**

**Answer any 2 (12 marks each)**

28. Write an essay on Neuroglia and its functions.
29. Write an essay on the Autonomic Nervous System and its functions.
30. Write an essay on the Thalamus.
31. Write an essay on the Peripheral Nervous System.

**(12 x 2 = 24)**